



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION VII

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DENVER, COLORADO 80202-2405

APR 18 1988

Schmitt



404038

Ref: 8HWM-SR

Kent Gray
Utah Department of Health
P.O. Box 16690
Salt Lake City, Utah 84116-0690

Dear Kent:

Enclosed are EPA's comments regarding the state-prepared SI reports for the Denver & Rio Grande - Roper Yard (North) (UTD980952782) and the Denver & Rio Grande RR - South Roper Yard (UTD981545932). I would suggest that after you and your staff have had a chance to read through our comments, that we discuss these comments by phone before proceeding with any revisions to the SI reports.

NORTH ROPER YARD (UTD980952782)

1. Although there is a wealth of useful information in the SI report, the discussion should focus more on identifying the release of hazardous constituents (i.e. source), the pathway (surface water, groundwater or air routes) and target populations. Then if appropriate, the discussion could include any remedial action being implemented and the results of any follow-up monitoring that would indicate the success of the remediation efforts.
2. Groundwater/Surface Water Monitoring-
 - a. The location map isn't clear as to where the background monitoring wells are located - labels don't match the wells in the tables. Please clarify the locations.
 - b. Additional information is needed on the suitability of these wells as background wells. The selection of these wells as background wells is questionable due to their proximity to the South Roper Yard and the Vitro Tailings sites.
 - c. Additional information should be provided on the location, completion and depths of the USGS well and the 'artesian' well mentioned in the report.
 - d. There is no explanation in the report as to why Mill Creek was not sampled for the surface water route. Mill Creek borders the southern boundary of the site.
3. Sampling Activities-

a. More discussion is needed on the sampling activities, the procedures followed, field measurements taken, etc. Although, references to a procedures manual are given, EPA is not familiar with this manual. A summary of sampling protocol etc. followed during sampling would suffice. Information should also be included on the number of duplicates, blind and spike samples, if taken. If the County or State took splits with Denver & Rio Grande, this data should be included along with a discussion comparing the results.

b. The report should include both a discussion of the quality assurance of the data and the laboratory quality assurance report. Without confidence in the data, EPA could not accept Denver & Rio Grande's data for the SI report.

4. Release of Hazardous Constituents-

a. The discussion regarding releases should be much more specific as to the organic or inorganic constituents of concern, the levels above background (or detection limits), which wells or other sampling locations show elevated levels, etc. Since 'release' is an HRS term and currently, the HRS model is being revised, the discussion should simply address elevated levels as 'n' times above background or detection limits.

5. Remedial Actions-

a. The SI report should include a detailed discussion of the type of remedial actions (e.g. product recovery, etc.) undertaken to clean-up surface water, groundwater or soil contamination. Any surface water or groundwater monitoring data collected since remedial action has occurred, should be included in the report also, with a discussion as to the effectiveness of the remedy as shown by the monitoring data.

6. Conclusions/Recommendations-

a. The conclusions to the SI report should be more specific based on the discussion regarding releases of hazardous constituents and on the effectiveness of any remedial action.

b. The recommendations should reflect current conditions about the site as best understood at this time.

SOUTH ROPER YARD (UTD981545932)

1. Editorial Comments-

a. EPA recommends that the State rewrite the SI report in the preferred format of our Analytical Results Report (ARR). There is a lot of extraneous comments that should be eliminated, as well

as inconsistent and confusing language. The SI report would improve overall with better organization.

b. The CERCLIS ID number needs to be corrected. The correct number is UTD981545932.

c. The meaning of the first full sentence on page 2 of the discussion is not clear. Please clarify.

d. EPA is not concerned about "organic" constituents or "radioisotopes". We are, however, concerned with hazardous or radioactive waste. The author should choose terminology more carefully in writing the SI report.

e. Again, the discussion should focus on identifying the source, the pathway and the target populations and then, if appropriate, on any remedial action that has taken place at the site.

2. It would help to focus on the specific concerns associated with the South Roper Yard, if the State could identify spills or activities that occurred in the southern yard as opposed to a discussion of general railroad yard activities. Basically, what I am asking for is a reason for the railyard being broken into two sites.

3. Sampling Activities-

a. More discussion is needed on sampling activities; how wells were purged and sampled; why sampling was conducted on two separate occasions (i.e. March & May); etc. Justification is needed for using data from two different dates in comparing upgradient vs. downgradient for purposes of a release.

b. Justification is needed for the selection of sampling locations, particularly the upgradient wells. The selected wells may not be appropriate as upgradient wells.

c. The location of wells sampled is not clear. The labels on the location map and in tables 1, 2 & 3 do not match. A map with sampling points clearly labeled is needed.

d. Well completion (i.e. depth, etc.) and construction information should be included in a table in the SI report.

e. Analysis for dissolved metals should be field filtered through a .45 micron membrane filter and then acidified with nitric acid to a pH of 2.0.

f. Field parameters for pH, temperature and specific conductance should be monitored and groundwater samples collected only after all field parameters have stabilized.

g. There is a contradiction between sample collection on page 18, where the report states that "no preservative was used in bottles to be analyzed for organics or for total chemistry which includes dissolved metals". However, under Quality Control page 24, the report states that "the dissolved metals were filtered and then preserved". The report should clarify which method was actually used. If the samples for dissolved metals were not acidified after collection and field filtering, many of the metals would precipitate and yield unreliable results.

4. Sampling Results-

a. The discussion of sampling results should be more specific to sampling location, contaminant and pathway.

b. The organic and radioactive analyses should also be tabulated for each sampling location as was done for the inorganic constituents.

c. On page 22, there is reference to Denver & Rio Grande's duplicate results, but these results are not included in the SI report. Please provide a copy of their results if available.

5. Data Quality-

a. The quality of the data collected during the SI may be questionable due to a number of concerns identified above. In addition, cadmium values in Tables 1, 2 & 3 appear to be suspect. The concentrations for dissolved cadmium are much higher than the levels for total cadmium. Laboratory contamination is suspected due to the higher values for dissolved vs. total cadmium. If, in fact, these concentrations could be substantiated, EPA would have to disagree with the State's conclusion regarding no 'significant' release to the groundwater system.

b. The laboratory quality assurance report and check should be included in the SI report.

6. Target Populations-

a. More information should be provided on the surface water and groundwater uses to accurately define the target populations. A listing of wells within a three mile radius and map showing their

location should be included in the SI report. It is not enough to count the number of people living within a three mile radius of the site; the population must be tied to groundwater wells within a three mile radius.

7. Conclusions/Recommendations-

a. A discussion of any remedial action being implemented at the site should be included along with any monitoring data that demonstrates the effectiveness of the remedy.

b. EPA does not concur with the State's recommendation for 'no further action' at the site at this time. Due to the concerns identified with the SI report, particularly with the data quality, there appears that there may in fact be releases to the surface water and groundwater pathways. EPA recommends a thorough reevaluation of the existing data and addressing of our concerns with the SI report, to determine if a valid release can be supported by the data and information. The State should determine if the SI report can be made adequate without additional sampling or if additional sampling is needed to support a 'release/no release' determination.

If you or your staff have any questions regarding these comments, please contact me at (303) 293-1518.

Sincerely,

Paula M. Schmitt diel
Paula M. Schmitt diel
Remedial Project Manager

cc: David A. Schaller